

# CENTERVIEWS

Air Force Center for Engineering and the Environment | Brooks City-Base, Texas

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BUILDING QUALITY OF LIFE  
NEW BASE FACILITIES  
SERVE AIR FORCE FAMILIES





Government contractors check on the progress of the Army Air Force Exchange Service fuel station being constructed at Vandenberg Air Force Base, Calif. From base exchanges to a youth center, a number of AFCEE projects focus on enhancing the quality of life for those who serve and their families. (Courtesy photo)



### Editorial Staff

Paul A. Parker, P.E., director

Col. Richard Bartholomew, executive director

Edward Noack, director, Financial Management  
and Mission Support Directorate

Michael Hawkins, chief, Multimedia and Public Affairs

Gil Dominguez, editor

Margaret Moore, photo and graphics support

### Editorial office:

HQ AFCEE/MSP, 3300 Sidney Brooks,  
Brooks City-Base, Texas 78235.

Telephone: (210) 536-4228;

DSN 240-4228;

fax (210) 536-5256.

E-mail: [afcee.pa@brooks.af.mil](mailto:afcee.pa@brooks.af.mil).

Visit CenterViews on the Web at

[www.afcee.brooks.af.mil/MS/MSP/center/centerviews.htm](http://www.afcee.brooks.af.mil/MS/MSP/center/centerviews.htm)

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Suggestions and criticisms are also welcome.

## Editor's Note:

The article "Air Force recognizes environmental efforts" that appeared in the winter 2006-2007 issue contained typographical errors. The General Thomas D. White Environmental Awards were for 2006, not 2207. No predictions of future awards were intended.

Also, the ceremony in Washington during which the awards were formally presented took place on June 7, not April 19.

Only eight of the winners were able to compete at the Department of Defense level because there are no corresponding Air Force Reserve, Guard or National Environmental Policy Act categories

*CenterViews* regrets the mistakes.



# Spring 2007

## Column

- 04** | View from the Center  
*The Air Force Center for Environmental Excellence is no more*

## Top Stories

- 05** | AFCEE and AAFES join forces to construct new facilities  
*Multimillion dollar projects at Vandenberg Air Force Base, Calif., and Keesler Air Force Base, Miss., are designed to improve the quality of life for military families.*
- 06** | New Lackland Youth Center opens  
*Modern facility offers children of service members a safe place to enjoy healthy and wholesome recreational activities.*
- 08** | Former Air Force base going to the Navy  
*Responsibility for Naval Air Station Joint Reserve Base Fort Worth, Texas, passes from the Air Force to the Navy.*
- 25** | New contractor at Air Force Plant 44  
*Missile production facility in Arizona is under new environmental management.*



## Departments

- 09** | Restoration
- 14** | Housing
- 17** | Iraq Update
- 20** | Around the Air Force
- 26** | Center Stage





# The Air Force Center for Environmental Excellence is no more

**A** FCEE is “dead.” Long live AFCEE. As I announced at my last director’s “stairway” call, the acronym AFCEE now stands for the Air Force Center for Engineering and the Environment. The new name comes as no surprise, of course, since most everybody knew in advance that a change was coming, and I tried to keep you informed from my vantage point on how that was progressing.

But, in another sense, maybe the Air Force Center for Environmental Excellence never really existed. From its very beginning, AFCEE has been more than just an environmental services center.

Although we have enjoyed remarkable success with our remediation and compliance programs and developed technical protocols that were in demand throughout the Department of Defense, our support has extended also into construction, design and other areas not directly related to the environment.

Those of you new to AFCEE may not know the Center was formed largely by combining a number of different organizations. AFCEE absorbed the mission and some of the staff of the old Air Force Regional Civil Engineer offices, and one of the first major organizations created here was the Construction Management Directorate.

In fact, the program action directive, or PAD, that resulted in our new name and organization is a civil engineer transformation plan.

This new PAD and the old one that created AFCEE back in 1991 are very similar, the main difference being that the recent plan involves the major commands.

The new name simply recognizes what we have always been and our work in the areas of engineering and environmental support. It formally recognizes also our new responsibilities as the Air Force’s focal point for military construction and environmental restoration. So while the new name no longer has the word “excellence” in it, we should never forget that excellence will always remain a core AFCEE value.

Lastly, the new name is the fruition of the dream held by Mr. J. B. Cole, the first director, and one of his successors, Mr. Gary Erickson, who had long wanted AFCEE to have a name that truly reflected its role in the Air Force mission.



AFCEE Director Paul Parker

I suspect they are proud of the new name and the work they did during their directorships to make it come to pass.

I hope you are proud of it, too.

Concerning the transformation, I want to touch on that just briefly.

The changes will make it possible to speak with a single voice about military construction and environmental restoration, and it will be the Air Force’s voice – not AFCEE’s.

That is a particularly valuable asset in the joint environment in which we find ourselves. Communication with our sister services will be better with AFCEE as the single point of contact for military construction and environmental restoration and will make it easier for them to do business with the Air Force.

AFCEE will be the one place where the other military branches will come to as we embark on joint ventures with them, concentrate on areas of mutual concern and support them with their projects.

We, the Army and Navy speak about the same things but in a different language, if you will. So it helps if the Air Force message is consistent, and I think that is possible now as we talk to them one-on-one.

This is a valuable asset as we speak with one voice also to our Air Force installations and major commands. We now take on a large facilitative role between installations, major commands, private sector partners and local, state and federal regulators to make sure we are meeting not only the needs of the Air Force but also the needs of the nation.

The culture within the federal government is changing, too, to one in which we assume a more hands-off approach. We need to optimize the tools in our toolbox – whether those are our contracts or technology – so that we don’t need high numbers of civilian employees to get a job done. This is an approach that all the services are studying and for which they are trying to find the right balance.

These are indeed interesting and challenging times, but I wouldn’t have it any other way. □

# AFCEE and AAFES join forces to construct new facilities

By Marti D. Ribeiro



Government contractors install a drip line, otherwise known as a soaker hose, in the median before the grass sod is laid down. This is one of the final steps before the Army Air Force Exchange Service fuel station is opened at Vandenberg Air Force Base, Calif. (Courtesy photo)

AFCEE and the Army Air Force Exchange Service have joined forces to design and build new facilities across the Air Force and continue the mission of improving quality of life for military families.

AAFES, which has its headquarters in Dallas, maintains more than 12,000 main exchanges, military clothing stores, movie theaters and other facilities worldwide – wherever American forces are stationed.

Previously, AAFES would seek out potential design and construction companies through the internal contracting process. Now it has the ability to tap into AFCEE's large library of contractors to get the best contracting bid for proposed facilities.

"We use our experience with a multitude of contractors and act like a search engine for AAFES, finding the best fit for a project," said Capt. Richard Dawson, AFCEE lead project manager.

The first AFCEE/AAFES joint project was a new \$3.83 million shoppette/gas station which broke ground in November 2005 at Vandenberg Air Force Base, Calif.

"We usually don't work with retail or gas station construction projects like this, so it's been a learning process," Captain Dawson said.

AFCEE specializes in environmental cleanup, housing and construction worldwide, including places such as Iraq and Afghanistan. The Center, however, had not previously built retail facilities.

"We work with AAFES to get the contract awarded quickly and cheaply to meet their unique specifications," said Kent Rohlof, also an AFCEE project manager.

According to Captain Dawson, AFCEE has had to overcome several challenges with this new territory, including making changes in the building process.

"In retail, we construct the building back to front, so the retailer can begin stocking items in the back storerooms while we continue to build the front," he said.

Another construction challenge new to AFCEE was the inclusion of food vendors in the building progression.

"It was strange to have soda machine installers, designers and food court vendors in and out of the building throughout the construction process," Captain Dawson said.

Other challenges include the consideration of return on investment.

Normally AFCEE constructs facilities based on need and monetary resources available. With AAFES, it has to find the "sweet spot" for the correct amount of square footage to get the best return on investment for the property.

But the Center has taken these challenges and learned from them as it begins to take on additional projects for AAFES.

The next joint venture project currently under construction is a new shoppette at Keesler Air Force Base, Miss., which had some interesting specifications in the contract.

"While our construction project isn't a result of Hurricane Katrina, one of the specifications in the contract was that the materials used in the construction be hurricane-proof," said George Garcia, another member

of the AFCEE project management team. "This made it difficult during the contract-award phase, since not many contractors use those types of materials."

"Working with AAFES definitely gives AFCEE the ability to step outside their comfort zone and try something new and exciting," Captain Dawson said.

According to the captain, the gas station built on Vandenberg AFB is the largest in-ground gas station fuel system in Santa Barbara County and has the most state-of-the-art fuel monitoring system that AAFES has ever built. The captain said he hopes this new design will set a precedent for the way gas stations are built in the future.

The 24-pump station opened Jan. 12.

Besides the Keesler AFB project, AFCEE currently has contracts to build new exchange shopping centers for Andersen Air Force Base, Guam; Offutt Air Force Base, Neb.; and Fort Drum, N.Y.

"Working with AAFES has been a learning process," Mr. Rohlof said. "We look forward to other joint projects in the future." □

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'Working with AAFES has been a learning process. We look forward to other joint projects in the future.'

Kent Rohlof, AFCEE project manager

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## New Lackland Youth Center opens

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An important quality of life issue for many Airmen serving at Lackland Air Force Base, Texas, is having a safe, modern facility in which their children can enjoy healthy and wholesome recreational activities.

In the past, youth recreational services at Lackland were located in multiple facilities scattered across the base, some of which were built in the early 1950's. Teen services had less than 1,000 square-feet of space and shared a building with the base post office.

The school-aged children's recreation program was housed at the base school. Supporting dual missions under one roof required converting the school's classrooms and cafeteria into play spaces each summer and then changing them back to their academic purpose each fall. These limitations meant that there was often not enough space to serve all of the children interested in participating in youth programs, and long waiting lists were common.

All of these facility issues were resolved in March when, with more than 300 future "clients" in attendance, the base's new Youth Center was officially opened.



More than 300 children gather for the ribbon-cutting ceremony inaugurating the new Lackland Air Force Base, Texas, Youth Center in March. The 34,000 square-foot building can accommodate 500 children at one time.



Col. Eric Wilbur, vice commander of the 37th Training Wing at Lackland, presided over the ribbon-cutting ceremonies, which featured a special performance of the National Anthem by future Youth Center user Martha DeLuzio.

The new, 34,000-square-foot Youth Center can serve nearly 500 children at any one time. It contains administrative areas, separate activity areas for different age groups, shared spaces, a music room, two multi-purpose gymnasiums, storage facilities and a full commercial grade kitchen.

Recognizing the stress that overseas deployment can have on family life, the facility is equipped also with a video camera system that will provide deployed parents, via a secure Internet link, the opportunity to view their children's activities in the Youth Center, from the basketball court to the air hockey tables.

The center is a Non-Appropriated Fund military construction project funded by the Air Force Services Agency, which provides Air Force people with quality of life programs and services.

AFCEE was the contracting agency. Dale Fox, Major Command and Installation Support Directorate, served as both AFCEE's project manager in charge of overall construction management process and contracting officer representative.

Others involved in the project were Sally Pennington and Sylvia Clark of Contracting and Tammy O'Neill, Mr. Fox's alternate.

"This building is simply wonderful," said Lucy Forcom, youth services director. "We have now combined three missions under one roof. The looks on the children's faces were priceless."

Teen director Tom Lynds said he has seen the number of teens participating in the program rise dramatically because of the new facility. Numbers of both enrollment and participants in the youth programs increased by three to four times within a month, he said.

Added Johanna Rios, Youth Center school-aged coordinator: "We now can provide a full range of services to all school-aged children, including a full summer program. Our ability to serve the community has increased. No longer will we have to turn down parents for the summer programs."

Work on the Youth Center started in August 2005 when the general contractor, Weston Solutions, Inc., began demolishing three base housing units that took up 45,000- square-feet of building area on the project site. The

contractor excavated all below-grade structures and used more than 18,000 tons of structural materials to backfill and compact the excavations to a depth of six feet.

The project was completed in 2006, with the interior build-out finished by the end of December, which allowed for the early March opening ceremonies.

"There were several hundred minor and major modifications necessary to complete the project," said Suzan O'Conner, of 3D/I-Parsons, which provided Title II (quality assurance) services support for the building. "The AFCEE format (however) minimized potential cost and schedule impacts by partnering with the contractor and client."



An interior shot of the new Lackland Air Force Base Youth Center. A unique feature of the building is a secure Internet link that allows deployed parents thousands of miles away to watch their kids at play, from the hockey tables to the basketball court.

Rob Tennyson, Weston senior project manager, said that, "without ... the AFCEE principle of partnership, the project schedule would have slipped and the budget would have been severely compromised."

AFCEE officials, in turn, said that the contractor was an "integral team member" who supported the AFCEE mission by "freely sharing information, ideas and technical expertise to address project challenges."

They added that Mr. Fox and Ms. O'Neill "maintained a high quality deliverable" that was completed within the construction budget authorized by the Air Force Services Agency. □

# Former AIR FORCE base GOING TO THE NAVY

On February 2 the Navy officially accepted the transfer of the former Carswell Air Force Base, Texas, from the Air Force.

The installation, now called the Naval Air Station Joint Reserve Base Fort Worth, was ordered closed during the 1991 round of the Base Closure and Realignment program and reopened in 1994 as a Reserve base with Air Force and Navy units.

AFCEE has been involved at NAS Fort Worth since 1996 when the Center was named the installation's major command for environmental restoration work there.

In 1997, the Air Force and Navy signed a memorandum of understanding, or MOU, that outlined both services' roles and responsibilities in the base's cleanup.

Navy officials said that the Air Force's remediation performance at NAS Fort Worth has been "excellent," resulting in the closing of 87 of 88 contaminated sites.

AFCEE officials said that while the Navy is now the installation's "owner," the Center remains the "operator" and will continue the environmental work until the last remaining site is closed.

AFCEE has used innovative technologies to quickly remediate and close contaminated sites. For example, in 2001 the Center successfully installed a 1,146-foot permeable reactive barrier, considered the longest continuous PRB in the world at that time, to remediate groundwater contaminated with trichloroethene, or TCE.

TCE and other contaminants in a groundwater plume are transformed into environmentally acceptable forms when they flow through the materials in a PRB. This type of barrier is a more effective alternative to conventional pump-and-treat systems, according to AFCEE officials.

At another site, a former base service station, a groundwater treatment plant was constructed to capture and remediate groundwater contaminated with fuel compounds, keeping the contamination from entering the adjacent West Fork Trinity River.

Most sites, however, were closed under the Texas Commission on Environmental Quality risk reduction regulations, which allow minor amounts of contamination

to be left in place if they are determined not to pose a risk to human health or the environment.

At the majority of the closed sites, no chemicals were released into the shallow groundwater aquifer, which, in any event, is not used for drinking or other potable water usage at the installation, said officials.

They added that by having the state and federal regulators actively participate in the base's cleanup program, the environmental team was successful in identifying and remediating 87 of the 88 contaminated sites that were identified in the MOU signed by the Air Force and Navy. □

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# Golf course cleanup completed

By Steve Brauner

A \$1.8 million environmental restoration project was recently completed at Mamala Bay Golf Course on Hickam Air Force Base, Hawaii.

The project involved extensive cleanup and restoration of the golf course.

A portion of Mamala Bay Golf Course lies over a former tri-services landfill that received municipal and construction debris from the Army, Navy, and Air Force between 1940 and 1965.

In addition, sand blast grit that is believed to have originated from ship maintenance activities at the Pearl Harbor Naval Complex was spread around the golf course in the mid-1980s as a fill material.

According to AFCEE project manager Bob Chang, the sand blast grit had to be removed because it contained high concentrations of arsenic. "During this remedial construction project, more than 1,600 cubic yards of sand blast grit were excavated from 24 locations around the golf course," he said.

The material was compiled into a grit consolidation cell constructed at the end of the golf course driving range.

Mr. Chang explained that construction of the grit cell in this location provided a long-term benefit to the golf course because it leveled off the end of the driving range, allowing golfers to more clearly see their practice shots land. In addition, minor repairs were made to the soil cover that protects site users from exposure to debris from the former landfill.

Parsons Infrastructure and Technology Group, Inc., the project's contractor, used in-house, on-island environmental construction capabilities to complete this design-build project on time and under budget, said Mr. Chang.

Mamala Bay Golf Course was kept open for business during the work through the use of a flexible construction schedule that met the needs of both golf course operations and the remedial effort. In addition, the crew worked a four-day, 10-hour construction schedule to eliminate the impact of construction activities on golf course operations on Fridays and weekends.

But, as with any project of this size, there were several challenges to overcome. "We used a team-oriented approach, which gave us the ability to overcome those unforeseen challenges safely and efficiently," Mr. Chang said.

He added that these challenges included the discovery of a larger volume of blast grit than expected, two unexploded ordnance items that had to be removed by base explosive ordnance disposal personnel and a mid-construction add-on requirement to excavate and consolidate material from a second base location to the grit consolidation cell.

Officials noted that consolidating material from the golf course and the second location into a new cell within the former landfill saved about \$1 million in off-site disposal costs.

The cost savings and the increase in safety are what made this a success, according to Bill Grannis, Hickam's Environmental Restoration Remedial Program manager.

"We consider the project a success at achieving our remediation goals and making the course a safer place to work and play," he said.

*Steve Brauner is a project manager with Parsons Infrastructure and Technology Group, Inc. □*



Workers with contractor Parsons Infrastructure and Technology Group, Inc., do environmental restoration work along the 11th hole at Mamala Bay Golf Course on Hickam Air Force Base, Hawaii.



Capt. Elisa Hammer, AFCEE environmental project manager, reviews the Urunao dumpsite with a contractor in Guam. AFCEE has taken on the two-year project to clean up the dumpsite, which was used in the 1940's to contain construction and aircraft debris. (Courtesy photo)

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# Air Force begins remediation at 62-year-old dump in Guam

By Marti D. Ribeiro

AFCEE is managing the project to clean up an old dumpsite near Andersen Air Force Base, Guam.

AFCEE contractor Shaw Environmental and Infrastructure, Inc., has begun the two-year-long job of removing waste from the Urunao Dumpsite, an area used during World War II to hold the debris from construction of Northwest Field and North Field, now Andersen Air Force Base.

This site is composed of several large cliffs, and the construction and aircraft debris were essentially pushed over the edge of the cliff. Eventually, the debris was covered with fill material and burned with napalm, according to Capt. Elisa Hammer, AFCEE environmental project manager.

"The primary challenge of this project is removing the decades of accumulated waste from over the side of the cliff," said Nestor Acedera, Shaw project manager overseeing the Urunao Dumpsite. The contractor plans to use specialized winching equipment, normally used by logging companies in the mountains, to reach down and remove the debris.

The majority of the cleanup is composed of solid waste removal. The waste consists of housing/construction debris like scrap metal and rusted containers, heavy machinery to include tires, aircraft parts and vehicle parts as well as inactive explosive ordinance materials like M-89 and M-90 target identification bombs.

According to the captain, Andersen has enacted an aggressive cleanup program to continue its environmental stewardship. Abiding by strict environmental guidelines, the Air Force has leased the private property to gain access and remediate the past remnants of the historic over-the-cliff dumpsite.

The Air Force originally considered explosive detonation to remove the waste, but this was decided against due to the potential impact to surrounding limestone, native species and archeological sites found near the dump.

"The Air Force is a steward of the environment and takes (seriously) the responsibility of adhering to local and federal statutes," Captain Hammer said.

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'The primary challenge of this project is removing the decades of accumulated waste from over the side of the cliff.'

Nestor Acedera, Shaw project manager

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The cumbersome process of removing the debris over the cliff has begun and is scheduled to be finished in 2009.

Since the dump is located on private property, the project has become a point of interest for the local community.

Public involvement in the cleanup decisions is accomplished through the local Restoration Advisory Board. The board is comprised of community members, elected officials, Air Force officials and representatives from environmental regulatory agencies. They meet on a regular basis to discuss program progress and advise the community on the status.

Keeping the public informed is crucial, according to the captain.

"This shows the local community our commitment to their land and their people," she said. □



# Bioremediation events

A workshop and a summit on enhanced in situ bioremediation, both events sponsored by AFCEE, were held at Brooks City-Base in April.

The one-and-a-half day workshop, offered free to participants, was conducted in the School of Aerospace Medicine auditorium with attendees receiving training on:

- Principles and practices of enhanced anaerobic bioremediation of chlorinated solvents;
- Technical protocol for enhanced anaerobic bioremediation using permeable mulch biowalls; and
- Protocol for in situ bioremediation of chlorinated solvents using edible oil.

In situ in general refers to remediation or cleanup done at a polluted site using or stimulating the soil's natural processes. Enhanced bioremediation involves adding a substance to the soil that will stimulate a site's naturally occurring microbes which then digest and degrade the contamination.

The workshop also covered information dealing with site screening, technology design, installation and monitoring; cost considerations and case studies.

Workshop organizers said the event, which was limited to 180 attendees, was a training venue for remedial program managers, site owners, regulators and environmental contractors.

Training materials from the workshop and the related protocols are available online on the AFCEE Technology Transfer enhanced bioremediation Website, [www.afcee.brooks.af.mil/products/techtrans/Bioremediation/default.asp](http://www.afcee.brooks.af.mil/products/techtrans/Bioremediation/default.asp).

Following the workshop, a one-and-a-half day, by-invitation-only summit was held in the AFCEE headquarters building. It focused on the biogeochemical processes in the degradation of chlorinated solvents.

Organizers said that summit invitees, who came from the government and private sectors and academia, are considered tops in the fields of in situ bioremediation and biogeochemical mechanisms.

The summit was sponsored by AFCEE, the Strategic Environmental Research and Development Program, the

Environmental Security Technology Certification Program, the Naval Facilities Engineering Service Center and the U. S. Environmental Protection Agency.

Officials said the summit's goal was to develop future directions and protocols for evaluating and predicting degradation of chlorinated solvents by biogeochemical processes.

Summit results also are available on the Technical Directorate Website.

Jim Gonzales and Erica Becvar of AFCEE's Technical Directorate said the Center has promoted in situ bioremediation, which is now used throughout the Air Force, for nearly 10 years. They added that they were excited about the process and particularly interested in "expanding the science and use of bioremediation because of its cost and performance effectiveness."

As examples of that effectiveness they pointed out that in 2005 the Air Force spent nearly \$26 million operating 119 groundwater extraction systems, such as pump-and-treat, across the country. While the number of such systems has declined over the years, they still represent 29 percent of the Air Force's remedial system inventory and 49 percent of the annual cost by remediation technology.

By contrast, in that same year in situ bioremediation was used at 157 sites across the Air



# held at Brooks

Force at a cost of \$13.3 million. It represented 39 percent of the Air Force remedial system inventory but only 26 percent of the annual cost by technology.

According to the same 2005 data, the average Air Force pump-and-treat system will continue to operate for another

27 years with lifecycle costs of nearly \$7.8 million apiece while the average site undergoing bioremediation would be expected to operate for 13 more years with a lifecycle cost of \$1.2 million. □



Dr. Bob Borden, a professor at North Carolina State University, makes a presentation at the bioremediation workshop sponsored by AFCEE at Brooks in April.  
(Photo by Gil Dominguez)

# 'Old Historic Bricks' homes get makeover

By Ernesto Perez and Dave Grafitti

One of the largest housing restoration projects on a military installation was recently completed – within budget and four months ahead of schedule.

The \$27-million restoration of 153 military housing units in 86 buildings located in the “Old Historic Bricks” section of F. E. Warren Air Force Base, Wyo., “constitutes one of the largest, if not the largest, restoration projects on any military installation in the United States,” said Sara Needles, Wyoming State Historical Preservation officer.

The work was completed in February by AFCEE contractor TolTest, Inc., of Ohio.

It consisted of refurbishing 25 single-family, 58 two-family and three four-family buildings, each averaging about 5,000 square feet.

The units are more than a century old, dating back to when F. E. Warren was established as an Army cavalry fort in 1867. The installation, now an Air Force Space Command base, was designated as a National Historic Landmark in 1975.

The project involved restoring or replacing more than 4,500 windows, over 6,000 doors and 165 porches on the buildings as well as doing landscaping and painting windows, doors, cabinets and porches.

Restoration included also duplicating more than 14 door styles, six trim profiles, six column variations, 38 window configurations and four styles of existing porch decking patterns.



One of the restored stately houses in the “Old Historic Bricks” section of F. E. Warren Air Force Base, Wyo. A \$27-million project restored 153 military units in 86 buildings.



Also, many layers of old lead-based paint had to be removed and the contaminated soil around the buildings abated.

At peak performance, the contractor worked on up to 50 houses concurrently, employing more than 200 skilled crafts and lead-abatement specialists in the process.

The project came in ahead of schedule despite being faced with a number of challenges, which included inclement weather, labor shortages and the constant moving in and out of residents because of military reassignments.

F. E. Warren officials said base personnel and the military families that will be occupying the restored housing units “were extremely pleased” with the quality of the work, which they said “exceeded base and Air Force Space Command expectations.”

They added that the base’s housing flight and 90th Civil Engineer Squadron worked with the contractor team to help coordinate work and project schedules and provided engineering support.

They further noted that the squadron and the contractor had “created a positive work environment, where teamwork and communication flourished.”

Because of the “frequent and open communications between all stakeholders,” they said, “the work was executed with zero impact to ongoing base operations,” while the team found ways to increase production, reduce unit costs and improve overall quality.

Base officials said that, ultimately, the Air Force will benefit from environmentally safe and energy-efficient housing that will keep its historic character for many years to come.

*Ernesto Perez is AFCEE’s manager for the F. E. Warren Air Force Base, Wyo., housing project and Dave Grafitti is the project manager with TolTest, Inc. □*

The “Old Historic Bricks” section of F. E. Warren Air Force Base, Wyo., ‘constitutes one of the largest, if not the largest, restoration projects on any military installation in the United States.’

Sara Needles, Wyoming State Historical Preservation Office



The interior of a house in the “Old Historic Bricks” section of F. E. Warren Air Force Base, Wyo.

# Base celebrates new housing programs

Dover Air Force Base, Md., recently celebrated completion of the first units in its privatized military family housing program.

The commemoration marked the first unit to be constructed in what will be a 980-unit housing complex.

Dover's Eagle Heights housing complex will include a recently completed, 10,000 square-foot community center which will feature fitness and game rooms, a business

center, a kitchen area for resident use and housing privatization offices.

Other amenities at the complex include a swimming pool, basketball and tennis courts, soccer fields, children's play areas and a jogging trail.

Staff Sgt. Carl Coffman and his family will occupy one of the new four-bedroom homes, base officials said. □



Alexia and Aaluce Coffman help cut the ribbon to their new home on Dover Air Force Base, Del. Joining in the ceremony are (from left) Col. Leonard Patrick of Air Staff; Chief Master Sgt. Bruce Blodgett, 436 Air Wing; the girls' father Staff Sgt. Carl Coffman (obscured) holding son Dakota; Dover city Mayor Stephen Speed; and Col. Sam Cox, wing commander. The Coffman family is the first to occupy one of the four-bedroom homes in the base's new housing complex.

# Mission in Iraq

## *A review of AFCEE's reconstruction work in the war zone*

By Marti D. Ribeiro

**B**uilding military bases, police stations and border forts from the ground up can be a daunting construction feat; but imagine doing it in an area where logistics support and the basic comforts of life are nearly impossible to find.

This is what an Air Force Center for Engineering and the Environment project manager has to face in Iraq where AFCEE has built 80 military bases, 360 police stations, 469 schools, 179 miles of pipelines and numerous other projects totaling \$3.5 billion during the last three years.

Thanksgiving 2003, then-U.S. Ambassador to Iraq, Paul Bremer, put in a request to identify agencies that worked indefinite-delivery, indefinite-quantity – IDIQ – contracts to start the reconstruction process in Iraq.

"AFCEE was identified as one of those agencies," said Gary Bergman, former chief of the Iraq division.

January 2004 saw the award of the first contract in Iraq to build the six-million-square-foot Al Kasik Military Base for approximately \$46 million.

"A week after the first contract was awarded, Dan Turek (the current AFCEE Iraq division chief) and I were on a plane to Iraq to set things up," Mr. Bergman said.

In the beginning stages of AFCEE's work in Iraq, project managers slept in ad hoc accommodations with 200 people sharing close quarters until other arrangements were made. It was during these inaugural stages that Mr. Turek and Mr. Bergman developed AFCEE's unique approach to work in Iraq.

"We were there from the beginning to help our contractors find villas for their people and set up things," Mr. Bergman said.

He believes AFCEE's success in Iraq is due to the fact that operations are based out of Brooks City-Base.

"We rotate a few (project managers) into the country every few months for continuity purposes, but a lot of the work is centralized at AFCEE Headquarters," he said. "Our goal was to minimize government presence over there."

To increase the efficiency of this approach, AFCEE developed a Web-based project management system.

"We've really embraced technology right from the start," Mr. Bergman said. "We've had a great attitude toward innovation, and it's helped us in the long run."

Since that development, AFCEE has been on the fast track to awarding contracts for other military bases, eventually

Completion date	Project	Contractor	Cost in Millions
Feb. 3, 2004	Gary Bergman/Dan Turek land in Iraq — first AFCEE members on the ground		
Dec. 30, 2005	Construction of Kirkuk Iraqi military base	ECC	75.9
Dec. 31, 2005	Reconstruction of Ministry of Defense building in Baghdad	Laguna Construction	31.4
Feb. 15, 2006	Construction of Tallil Iraqi military base	Weston Solutions	95.8
Feb. 28, 2006	Construction of military installation at Al Kasik	Shaw Environmental	92.2
Aug. 31, 2006	Construction of An Numaniyah Bridge	Laguna Construction	42.5
Sept. 15, 2006	Construction of ship lift and port at Umm Qasr, Iraq's only port.	Weston Solutions	23.7
Nov. 1, 2006	Construction of Al Kut Police Academy	ECC	26.1
Nov. 20, 2006	Construction of brigade facility for Iraqi 1st Division Headquarters at Ramadi	Ellis World Alliance Corporation	34.2
Dec. 7, 2006	Construction of police stations in Baghdad	Tetra Tech - FW. Inc	53.9



expanding out to border forts, ministry buildings, police stations and police academies, said Craig Mayo, AFCEE Iraq project manager at Brooks City-Base.

The magnitude of AFCEE's Iraq construction projects has grown exponentially since the first contract was awarded.

"The Iraqi Army has eleven divisions, and we're building bases for all eleven," he said. "We do all the infrastructure to include electrical and utilities for all of the facilities."

Because there was so much work to do, AFCEE in April 2006 formed the Iraq division and began tackling such large projects as the military bases in Tallil and Kirkuk, which have totaled more than \$100 million per project.

But besides size, these projects provide challenges unique to this area of the world.

"We have to make sure we can feed, clothe and house the workers and that we can move equipment and supplies," said Roger Johnson, also an AFCEE Iraq project manager at Brooks.

Along with life support, contractors working in Iraq must also provide in-depth security for their personnel and supplies.

"Security for a project can be as expensive as the construction itself," Mr. Mayo said.

According to Mr. Johnson, security is more of an issue at locations that have gained a lot of attention from the local population.

"The police stations were one of the most difficult tasks due to the attention from the local population and media," Mr. Johnson said. "They've definitely garnered the most attention ... from insurgents."

Although security is expensive monetarily, the cost in lives is incalculable. Four American, one Turkish and 202 Iraqi prime and subcontractors have died from insurgent attacks and accidents since reconstruction work began in 2004, according to AFCEE records.

Unfortunate as the losses are, AFCEE officials feel they've made a positive impact on the people of Iraq.

"Our contractors set up training programs to educate local Iraqis on western building techniques," Mr. Mayo said. "Those programs have paid big dividends since now they have a pool of trained labor for various projects."

Skills training may also improve the lives of Iraqi workers, which could improve the security situation, AFCEE officials suggest.

As positive as the impact of AFCEE's work in Iraq may have been, the Center's future there is unknown at this point.

"Every year they've projected that it was going to stop the following year, but it hasn't," Mr. Mayo said. "Right now, we're still projecting to award contracts for another year."

Currently, AFCEE is working closely with the Multi-National Security Transition Command-Iraq and the Iraqi Ministry of Defense to build additional brigade elements, including standing up the Iraqi Army's new 12th Division.

AFCEE will stay in Iraq until the current contracted projects are finished, Mr. Mayo said. □

## AFCEE Honor Roll

The following have all served in Iraq working on AFCEE-related projects:

### Civilians

Gary Bergman  
Dan Turek  
Charlie Rice  
Chris Hobbins  
Tracy Kissler  
Vince Laborde  
Deven Dalcher  
Matt Parker  
John McCown  
Matt Martin  
Roger Johnson  
Nick Acay  
Pat Rowans  
Roby Gregg  
Robert Lopez  
Don Ficklen  
Charlie Brown  
Dave Eklund  
Dave Gibson  
Neyda Gutierrez  
Margaret Harris  
James Montgomery

### Military

Col. Ed Henson  
Lt. Col. Spencer Patterson  
Lt. Col. Stephen Grumbach  
Lt. Col. John Floden  
Lt. Col. Mike Prazak  
Lt. Col. Chris Williston  
Maj. Tom Williams  
Maj. Roberta Lenski  
Capt. George Franklin  
Capt. Sarah Christ  
Capt. Richard Dawson  
Capt. David Pratt  
Capt. Tammy Gray

# AFCEE CONTRACTOR HELPING CHILDREN GET MEDICAL TREATMENT

Though once boasting complete, modern medical treatment, Iraq's clinics and hospitals have suffered from a decade of embargo, as well as overuse from years of war. But for months now, children in need of medical care have been quietly shuttled out of their country to receive treatment unavailable at home.

AFCEE prime contractor ECC is assisting Iraqi children through the National Iraqi Assistance Center, an organization that helps kids get medical treatment unavailable in Iraq's degraded health system.

The NIAC, which has links in Jordan and Kuwait, has helped more than 130 children find treatment outside of Iraq.

The NIAC team is headed by Capt. Lance Carr, director, and medical officer Capt. Suzanne Tetreault, both of whom are Navy personnel.

Assistance starts with a referral, from a local or U.S. military doctor, or any person who knows a child needing medical care. NIAC's Iraqi and Iraqi-American doctors examine the patient or study the person's medical records to identify conditions that can be surgically repaired or readily cured. These include congenital defects, such as cleft pallets and heart problems or correctible eye problems like cataracts.

Unfortunately, at this time chronic conditions or those requiring lengthy care, such as cerebral palsy or cancer, are excluded because of limited resources.

Hospital shopping then begins. Several patient histories will be sent to various hospitals in Jordan, Kuwait, Qatar, Turkey, India and the United States, where medical directors can select a case they wish to treat, either at a reduced fee or for free. In the case of cardiac patients, Rotary Club International often steps in to assist.

"The less complex the surgery, the more likely we are to find sponsors," said Captain Tetreault. "NIAC could easily identify 500 potentially treatable cases."

Finding a medical facility is still only the beginning. There are passports and visas to acquire, with the latter being almost impossible to obtain for fathers seeking to escort their children to the United States.

Then, accommodation and translation services must be found for an accompanying guardian. Most families cannot afford their flights, even with reduced air fares. ECC, however, was able to include several young patients and their moms aboard the company's regularly scheduled personnel

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*The NIAC, which has links in Jordan and Kuwait, has helped more than 130 children find treatment outside of Iraq.*

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transport flights between Baghdad and Amman, Jordan, and helped one wounded girl reach treatment in California.

Staff Sgt. Marikay Satryano of the Civil Affairs Team coordinates medical treatment in Jordan and assists those traveling elsewhere for care. She worked with ECC to fly a cardiac surgery team from Indiana to Amman to operate on seven Iraqi and four Jordanian children. ECC accommodated the surgeons during their stay and paid for two of the surgeries.

There are hundreds of children in Iraq who need help, and ECC officials said that in the upcoming months they will initiate a program to better serve those needs. □



An American physician does a post-surgical examination on an Iraqi child. (Courtesy photo)

# Assessment team



Bill Anderson, assistant secretary of the Air Force for installations, environment and logistics, and Tech. Sgt. Latha Caillouette inspect a frayed power cord in the 9th Civil Engineer Squadron's Operations Flight Vertical Shop at Beale Air Force Base, Calif. Mr. Anderson joined an Air Combat Command team to see how ACC conducts its Environmental Safety Occupational Health Compliance Assessment and Management Program.



# includes a senior Air Force official

Maj. James King  
Air Combat Command

Bill Anderson, assistant secretary of the Air Force for installations, environment and logistics, visited Beale Air Force Base, Calif., recently to see how Air Combat Command conducts its Environmental Safety Occupational Health Compliance Assessment and Management Program.

Mr. Anderson, who had heard about ACC's "lean" program adjustments to the ESOHCAMP process, wanted to participate in the assessment.

Beale's civil engineers had received only a ten-day's notice of the command's assessment and that the team would include the senior official.

Not just an observer, Mr. Anderson took part in the assessment, marking protocol checklists for ground safety, hazardous waste, occupational health and water quality.

At the end of the four-day assessment, the team identified areas where the base was vulnerable to being noncompliant and initiated ten root-cause analyses.

Mr. Anderson said he was impressed with the overall direction ACC is taking the ESOHCAMP assessment process. "No-notice assessments are the only way to truly evaluate our day-to-day compliance," he said.

He added that he appreciated the chance to interact with shop personnel and hear their concerns first-hand.

"I applaud ACC for stepping out to conduct, and integrate environmental, safety and occupational health ESOHCAMPs," said Mr. Anderson. "It is the right thing to do for our Air Force."

Col. Tim Byers, ACC's director of installations and mission support at Langley Air Force Base, Va., had challenged the command's civil engineer, environmental and occupational health and safety communities to improve their ESOHCAMPs. He noted that while the old process was effective, it did not promote sustained compliance, which caused a rise in enforcement actions as well as repeat findings.

So the command unleashed a "rapid improvement event" under the lean process to establish goals that would lead to a better assessment program.

"Once the rapid improvement event identified the wing commander as the ESOHCAMP's main customer, these

goals were easily identified," said David Gilbert, ACC's ESOHCAMP manager.

The goals included eliminating repeat findings by getting at their root cause.

ACC officials found that although installations spend considerable time preparing for ESOHCAMP, 70 percent of the findings are repeats. Some of the changes in the program now include limited notice to the wing commander about an upcoming assessment and smaller assessment teams – reduced from 25 to nine members.

The assessment teams are comprised of representatives from medical, ground safety and mission support organizations who evaluate air and water quality, wastewater, hazardous waste and numerous other areas.

Probably the most important assessment change is that base personnel are trained on root-cause analysis so that repeat findings can be eliminated. These findings continue to fall in the same areas of procedure implementation, personnel execution and management oversight.

ACC assessor teams now work more closely with base personnel to analyze root causes before determining what corrective action plans will be implemented. Also, root-cause analysis is applied to the entire base, not just the shop that incurred the finding.

"This process will move the ESOHCAMP from risk awareness to risk reduction, providing sustained compliance that will increase mission capabilities," said Colonel Byers.

Through the lean process, ACC has saved 2,460 man-hours and \$135,000 per ESOHCAMP assessment, making it a more efficient tool, he said, adding that sustained base compliance increases capabilities and gives commanders the opportunity to dedicate maximum resources to the Air Force's war-fighting mission.

The new ACC assessment efforts focus only on regulatory compliance and worker health and safety risks. Other evaluations will be conducted using current guidance or will be assessed internally.

*Major King is chief of the ESOHCAMP for the Installations and Missions Support Directorate at ACC headquarters, Langley Air Force Base, Va. □*

# First-of-its-kind approach at MacDill

Air Mobility Command is testing the first-of-its-kind approach to the environmental restoration program at MacDill Air Force Base, Fla.

It involves a “fence-to-fence,” or base-wide, performance-based contract that aims to have remedies in place at 21 environmental restoration sites and a preliminary assessment of another area by September.

Command officials explained that a performance-based contract, or PBC, differs from other contract structures in that the Air Force doesn’t lay the project out step by step. Instead, it sets a goal, and contractors bid for the proposed schedules they believe they can meet. Once the Air Force awards the PBC, it is the contractor’s responsibility to achieve the goal.

The fence-to-fence strategy means that one contract is awarded for all the known contaminated sites on an installation, instead of separate contracts for different aspects of the environmental restoration program, or ERP. Officials say this type of approach offers the best value to the Air Force.

Earth Tech, Inc. is MacDill’s PBC contractor. The contract was awarded through the U. S. Army Corps of Engineers’ Omaha District.

Robert Hofelich, chief of AMC’s Environmental Restoration Branch in the Directorate of Installations and Mission Support, said the command decided to test its first fence-to-fence PBC at MacDill because the base’s ERP sites had been “sufficiently characterized,” or analyzed, and “even more importantly, MacDill regulators were committed to the initiative.”

Daphne Williams, Earth Tech’s PBC project manager, said she believes flexibility is one of the great advantages of a fence-to-fence contract. She noted that while the contract had covered only the 22 original sites, the PBC has been expanded to include three other compliance sites, with more to come. “Success of the PBC to date provides an opportunity for MacDill Air Force Base to be aggressive and add more sites,” she said.

The fence-to-fence concept includes also a base-wide monitoring program whereby sites are monitored and analyzed together rather than individually. This procedure reduces the number of wells to be sampled, saving time and money, officials said.

The installation’s efforts involve also the “partnering” approach, which has been around since the 1990s. The program consists of three teams in three tiers, each representing different levels of responsibility.

The Tier I partnering team supporting MacDill’s PBC includes Richard Burnette, chief of the base’s Environmental Restoration Flight chief; Tish Matty, Earth Tech remedial project manager; representatives from AFCEE and the U. S. Army Corps of Engineers; and Jim Cason of the Florida Department of Environmental Protection.

*The fence-to-fence strategy means that one contract is awarded for all the known contaminated sites on an installation, instead of separate contracts for different aspects of the environmental restoration program, or ERP.*

MacDill officials said the latter has “been a longtime driving force behind partnering in Florida.”

The Tier II team includes key Florida state environmental regulators Eric Nuzie and Jim Crane; and Earl Bozeman of the federal EPA Region 4.

The third team is a multi-state partnering group.

Mr. Burnette said he has seen important environmental initiatives succeed as a direct result of

partnering and looks forward to the “same success with the base’s ambitious performance-based contract.”

“We could not have a successful PBC without being where we are in partnering,” he said, citing particularly the support of the environmental regulators and the Corps of Engineers.

Mr. Burnette added that partnering had achieved “risk closures” for some ERP sites, meaning that statistical evaluation had determined that risk to human health and the environment was minimal and no active remediation was required for those sites.

This determination saved the Air Force money and prevented site contamination from interfering with the base’s mission.

“Risk closures require regulators to concur with the contractor’s approach and analysis,” Mr. Burnette explained. “In this case, regulatory approval was gained smoothly in large part because of the long-standing relationship and trust established among partnering team members.”

“MacDill’s success today is tied directly to the partnerships formed at every level,” concluded Mr. Hofelich. “We plan to use the MacDill PBC model at other AMC installations to generate more success across AMC. PBC is the way ahead at AMC.” □



Richard Burnette, chief of the Environmental Restoration Flight at MacDill Air Force Base, Fla., is shown in front of an aircraft hangar complex undergoing soil remediation. The base is testing a base-wide, performance-based contract for its environmental restoration work. (Photo courtesy Earth Tech, Inc.)



# AFMC EXCEEDS AIR FORCE ENVIRONMENTAL GOALS

By Ed Finke  
Air Force Materiel Command

**Editor's note:** Statistics released by Air Staff earlier this year showed that the Air Force had remedies in place or had completed a response at 89 restoration sites for 2007. This brought the total number of sites that achieved some type of closure to 118, comfortably exceeding the Air Force goal of 27 sites. The following article tells how one major command helped produce this achievement.

**I**n 2006, Air Force Materiel Command once again exceeded its fiscal-year goals for getting final remedies-in-place and/or completing all necessary response actions, also known as RIP/RC, at its Installation Restoration Program sites.

Our FY06 program, consistent with prior years, resulted in achieving all of our planned RIP/RCs and exceeded our projections from the beginning of the fiscal year by an additional nine sites, bringing the total RIP/RC for FY06 to 71 sites. AFMC accounted for 28 percent of the 249 sites where the Air Force achieved RIP/RC in the last fiscal year.

Over the years, we have consistently met or exceeded our goals in the IRP program. With a total of 2,131 sites in its inventory, AFMC has RIP/RC at 1,992 sites. That represents approximately 94 percent of the sites in the AFMC IRP site inventory. We have only 139 sites not yet completely cleaned up or without a final remedy in place.

Working closely with the regulatory agencies, we have:

- Closed out more than 1,250 of our sites after the initial investigations;
- Used in-depth, remedial investigation data to show the Air Force, regulatory agencies and other stakeholders that no further response actions were necessary at another 352 sites; and
- Completed short-term remedial actions at an additional 316 sites.

Ongoing cleanup actions continue at 52 sites with active remediation systems, and an added 18 sites are being addressed by monitored natural attenuation and/or land-use controls.

It can be a real challenge to balance our commitment to protect human health and restore the environment, and do it in the most cost-effective manner possible. We have done extremely well in this respect by installing remedies and conducting removal actions to protect human health when and where necessary. At many of our sites, sampling

has shown that there is no significant risk to health or the environment and thus no cleanup is needed.

Furthermore, AFMC pioneered the Project Peer Review and Remedial Process Optimization programs to maximize the efficiency of the cleanup program. Since the early 1990s, we have been conducting peer reviews on all remedial action projects that exceed a threshold dollar amount. The peer review is to ensure that the proposed remedy is the smartest possible approach to conducting the cleanup. It allows for a fresh look at the problem from a fresh set of eyes that may see a more effective or efficient approach before the investment is made. This review is conducted by a group of experts from AFMC and its installations, the Air Force Institute of Technology and AFCEE.

The RPO program, which kicked off in 1999, is a means to maximize efficiency and reduce costs once a remedy is in place. The cleanup system and related groundwater monitoring efforts are studied to look for opportunities to save time and money. If the return-on-investment is good then the recommendations are implemented. We have documented more than \$76 million in lifecycle cost avoidances in the cleanup program since the inception of the RPO program.

We've managed the program using a systematic approach that employs diligent planning, partnering and persistence at both the major command and installations. The foundation of ensuring progress in the program begins with a well-thought-out, realistic strategic plan that takes into account the necessary steps in the cleanup process as well as funding constraints. The concept of stable funding has set the stage for comprehensive planning at our sites. By having a known target for each year of what to expect in terms of total funding we are able, in consultation with our installations, to establish a workable plan for each and every site.

The second key is partnering with the regulatory agencies and local community to ensure they understand and support this plan, otherwise it has limited chance of success. Our installation RPMs work closely with the U.S. Environmental Protection Agency, state and local regulatory agencies and their restoration advisory boards during site cleanup strategy development and ensure they understand any related fiscal constraints.

The final and crucial step in our success is persistence. We closely monitor site progress throughout the year to identify early on if there are any issues that may affect our ability to meet our targets. We work closely at all levels to resolve the issues to ensure continued progress at our IRP sites.

We have more sites in our program than any other command and by far some of the most complex sites. Our

installation restoration staffs are doing an outstanding job at the grass-roots level, closing sites and getting remedies in place to mitigate risks. We are leading the Air Force in the cleanup program, going from 25 percent to 94 percent in the past 12 years.

This is phenomenal progress in a program that is so complex, highly regulated and involves a huge amount of public-relations work. I think that through our model of planning, partnering and persistence we will be headed well toward achieving the Air Force goal of getting final remedies-in-place at all of our sites by 2012.

*Ed Finke is chief of the Environmental Programs Branch at AFMC Headquarters, Wright-Patterson Air Force Base, Ohio. □*

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## New contractor at Air Force Plant 44

**T**he Installation Restoration Program at Air Force Plant 44, an Air Force missile production facility southwest of Tucson, Ariz., is under new management.

Earth Tech, Inc., will be operating the plant's soil and groundwater remediation systems under an AFCEE contract. The facility is owned by the Aeronautical Systems Center at Wright-Patterson Air Force Base, Ohio.

Earth Tech is continuing the IRP work previously done by Raytheon Missile Systems Co.

AFP 44 is a Superfund site under the federal Environmental Response, Compensation, and Liability Act, or CERCLA, which requires responsible parties to clean up contaminated land.

IRP services at the plant include operating and maintaining the regional groundwater treatment plant, the shallow groundwater zone dual-phase extraction system and two in-situ chemical oxidation pilot studies; closing several soil vapor extraction systems; and all regulatory tasks normally related to this work.

These remediation systems serve the vital function of protecting the region's groundwater, which is its main source of drinking water.

ASC project manager George Warner said his organization decided to change contractors because they wanted a "third-party operator" to run the IRP program. Raytheon, which specializes in defense and missile systems, manages the plant overall.

AFCEE project manager Dario Beniquez assisted Mr. Warner in creating and managing a task order and then selecting the company they felt was the best fit for the job.

They said Earth Tech was "the natural choice" because the company has almost 20 years of history at the site and is a large company with experience in environmental services as well as waste and wastewater systems.

Also, ASC was seeking value engineering services to help control costs and assure effective remediation, and the selected contractor has extensive experience in that area, the officials said.

Earth Tech project manager Bill DiGuseppi said the transition from Raytheon to his company went well, due in part to the fact that his firm was able to retain many of the existing subcontractors that provide support in such areas as instrumentation and controls, sampling, well maintenance and hydrogeologic services.

Mr. DiGuseppi added that his company is working with the Air Force to identify, repair and replace plant equipment that is aging and showing signs of wear.

The main plant complex was built in 1951 for the Hughes Aircraft Co., which later sold it to the Air Force. At one time it was the prime production facility for the Falcon air-to-air missile. □

An overhead view of the groundwater treatment plant at Air Force Plant 44 in Tucson, Ariz. Earth Tech, Inc., took over management of the water treatment plant and as well as the overall Installation Restoration Program from Raytheon Missile Systems Co. (Courtesy photo)



# Longtime staffers retire

Two longtime members of the AFCEE staff have retired after more than 72 years of combined federal service.

George Gauger and Dan Mooney, both of whom joined the Center when it was newly established in the early 1990s, ended their government careers in March.



George Gauger

Mr. Gauger's federal employment spanned nearly 36 years, including six years as an Army officer.

A graduate of Northeastern University in Boston, he was commissioned a second lieutenant in the Regular Army in 1964 and served active-duty assignments with the 3rd Armored

Division in Frankfurt, Germany; the 52nd Combat Aviation Battalion in Pleiku, South Vietnam; and the United States Army Signal Center and School, Fort Monmouth, N.J.

Mr. Gauger continued serving in the Army Reserve, retiring in 1992 with the rank of lieutenant colonel.

After earning a master's degree in landscape architecture and regional planning from the University of Massachusetts in Amherst in 1972, he went to work as a city planner with the city of Northampton, Mass., and then as a county planner in Franklin County in Greenfield, Mass.

Mr. Gauger began his Air Force career in 1978, serving as base community planner with the 317th Civil Engineering Squadron at Pope Air Force Base, N.C. In 1980 he moved to Scott Air Force Base, Ill., where he held the same office with the 375th CES.

In 1984 Mr. Gauger moved to Headquarters Strategic Air Command at Scott and was named the division chief responsible for community planning for SAC's twenty-five bases.

Five years later he became the first chief of the Environmental Planning Division in the newly established Environmental Planning Directorate, managing the Environmental Impact Analysis Process for SAC's Military Construction Program and bases selected for closure by the Base Realignment and Closure Commission.

In 1992 Mr. Gauger moved to the newly established AFCEE where as project manager in the Environmental Conservation and Planning Directorate managed environmental impact analyses for BRAC bases.

Mr. Gauger became chief of the Project Execution Division in 2002. Under his leadership environmental impact statements were completed for the dismantlement of the Minutemen II and Peacekeeper Missile Systems.

In 2003 Mr. Gauger became chief of the Base Conversion Directorate's West Division where he managed an annual remediation program valued at about \$50 million and encompassing eleven bases from California to Louisiana. In addition, Mr. Gauger initiated and organized the BRAC 2005 program for the Air Force Real Property Agency.



Dan Mooney

Mr. Mooney also retired in March after 36 years of federal service. A program manager in the Base Conversion Division, he moved to AFCEE in 1991, the year the agency was established, from the former Carswell Air Force Base in Fort Worth, Texas.

Mr. Mooney began his government career while still a student at Georgia Tech University in Atlanta, working with the U. S. Army Corps of Engineers in Mobile, Ala. He obtained a degree in civil engineering in 1973 and a master's in sanitary engineering in 1974.

He worked briefly in private industry before joining the U. S. Environmental Protection Agency's Region 4 in Atlanta. There he was assigned to the municipal sewage treatment facilities grant program with the State of Florida.

In 1977 Mr. Mooney left the EPA to return to the U.S. Army Corps of Engineers' Mobile District. In this assignment he participated in water quality studies for reservoirs, headed the district polychlorinated biphenyl, or PCB, inventory and prepared environmental assessments and impact statements and wetland evaluations for civilian and military project permits.

Mr. Mooney began his career with the Air Force in 1980 as the base environmental engineer at Charleston Air Force Base, S. C.

From 1988 to 1991 he supervised 45 civilians



and military personnel in the Carswell Engineering and Environmental Planning Branch, which oversaw the environmental, design, contract management, and real property programs. Under Mr. Mooney's tenure, more than \$21 million of major construction work was completed at the base.

In 1991 he started working in the Program Management Division of the new Air Force Center for Environmental Excellence (now the Air Force Center for Engineering and

the Environment). In 1997 he transferred to what is now the Base Conversion Directorate. In this assignment he managed the preparation of environmental impact statements for closure and reuse of several bases and oversaw a number of multimillion dollar projects.

Mr. Mooney and his wife Cynthia have two sons, Jason and Joshua, both living in Houston. Jason is an architect and Joshua a middle-school band director. □

## Former Iraq reconstruction program chief leaves federal service

By Marti D. Ribeiro

The director for Major Command and Installations Worldwide is leaving after 23 years of federal service.

Gary R. Bergman, who joined the Air Force Center for Engineering and the Environment in 1994, ended his government career in May.

He is leaving the Center to become director of international development at ECC, a government contractor with corporate headquarters in California.

In his most recent position at AFCEE, he has overseen more than \$3.5 billion in reconstruction work in Iraq to include schools, bridges, Iraqi military bases, police stations, water wells and the Ministry of Defense building.

But his distinctive accomplishments with the federal government don't start there.

Mr. Bergman enlisted and served honorably in the U.S. Marine Corps from 1971 to 1975. Five years later, he graduated from Montana State University with a bachelor of arts in architecture and went into private practice in Billings, Mont.

His government career began in 1984 as the base architect for Malstrom Air Force Base, Mont. Two years later he moved on to become the base architect at Pease Air Force Base, N.H. After two years there, he took a trip across the ocean to Japan and became the chief of design at Marine Corps Air Station Iwakuni. He stayed in Japan for six years, moving on to other positions as the facility planning director and the Japanese facility improvement program director.

It was in 1994 that Mr. Bergman joined AFCEE as a program manager for the European Team in the Environmental Restoration Division. Two years later he was promoted to chief of the Alternate Funding Division in the IW directorate.

In 2003, after AFCEE decided to get involved in contracting projects in Iraq, Mr. Bergman became the director of the Iraq Reconstruction Program and was one of the first AFCEE members on the ground in that country.

He worked with the Iraq division for three years before being promoted to his current position as IW director in 2006.

Mr. Bergman earned a Commendation for Civilian Service from the Marine Corps in 1994. His time in Iraq garnered him an Exemplary Civilian Service to the Department of the Air Force award in 2003 and a Civilian Award for Valor in 2004. □



Gary Bergman "enjoys" his first MRE (meals ready to eat) in Iraq. The director for Major Command and Installations Worldwide is leaving AFCEE after 23 years of federal service.

## Budget analyst closes out ledger



Lois Clark

Lois Clark, a budget analyst with the Resources Management Division of the Financial Management and Support Directorate, retired in March after almost 37 years with the civil service.

She began as a clerk-typist before moving into the financial area, going from accounts maintenance clerk to budget technician and finally budget analyst.

Because of her husband Kenneth's military career as an Air Force officer, Ms. Clark worked in a number of bases all over the United States. She moved to AFCEE in 2005 as a budget analyst supporting a number of major commands.

Ms. Clark is a graduate of the University of Colorado at Boulder with a bachelor of science degree in business. □

## Engineers receive P. E. licensure



Tariq Ahmad

Tariq Ahmad, an engineer in the Technical Directorate, has received his professional engineer licensure, which allows him to use the designation "P.E." after his name.

Mr. Ahmad, who has been with AFCEE since 1995, has a bachelor's degree in civil engineering and master's degrees in civil engineering and geohydrology. He has experience also in geotechnical, hydraulic and environmental engineering and mathematical modeling.

Mr. Ahmad was a hydrologist in the private sector before coming to work for the government. At AFCEE he has received numerous commendations for his high quality technical work for AFCEE customers.

Rhonda Hampton, chief of the Education, Training and Materiel Support Division, also received the P.E. licensure after taking the required examination in April.

Additionally, Capt. Dave Pratt was recently informed that he had passed the Fundamentals of Engineering exam, which is the first step toward licensure. He is a project manager/contracting officer's representative in the Space Support Division.

AFCEE officials said that passing an engineering exam years after leaving college is "a tremendous accomplishment."

The P. E. licensure is the mark of a professional, officials said, demonstrating that the recipient has reached the high standards of professionalism required by the engineering field.

Although each state has different criteria, in general the P. E. licensing process requires a combination of education, experience and examinations before the candidate is eligible for licensure by the state's licensing board. □



Rhonda Hampton

# ARCHITECTS *NAMED TO COLLEGE OF FELLOWS*

Two architects with strong connections to AFCEE have received “one of the highest honors” bestowed by their professional organization, officials with the American Institute of Architects announced recently.

Gary Lynn and Paula Loomis were elected to the AIA’s College of Fellows by a jury of their peers, said organization officials, adding that the honor recognizes the achievements of “architects who have made significant contributions to architecture and to society.”

The new fellows are now entitled to use the designation FAIA after their names.



Gary Lynn

Mr. Lynn is one of only six Texans selected for the honor this year, officials said.

He was one of the original AFCEE staff members when the Center was organized in 1991 and served as the Air Force’s chief architect.

AIA officials said Mr. Lynn was recognized for the “exceptionally high design standards” he set with the Air Force and “implementing

new processes that created a climate in which good design can flourish.”

They added that Mr. Lynn helped start the Air Force Design Awards Program in the late 1970’s and was co-founder of the Air Force Architectural Assistance Team Program.

“I am honored to receive this award because it recognizes the tremendous effort the Air Force has made to achieve an exceptionally high level of architectural excellence,” said Mr. Lynn.

After retiring from civil service the former government employee joined 3D/I, where he served as senior vice president, and recently accepted a similar position with Carter & Burgess.

Mr. Lynn holds a bachelor’s degree in architecture from Kansas State University and master degrees in architecture and urban design from the University of Illinois and in interdisciplinary studies from the University of Texas.

Ms. Loomis is an Air Force Reserve colonel who has been active in AFCEE’s design assistance team program, having served in 51 teams at 29 bases.



Paula Loomis

AIA officials described her as a “light the engines, hit the afterburners advocate for top quality, top-performance architecture.”

Within the Air Force, Ms. Loomis has set design standards for more than 23 building types and 36 bases, raising the quality of design as well as the buildings’ durability, officials noted.

They added that she invigorated also the Air Combat Command Design Awards Program, taking it from winning zero honors to garnering 30 percent of the Air Force Design Awards every year.

Ms. Loomis is presently assigned to Air Force Materiel Command Headquarters at Wright Patterson Air Force Base, Ohio where she is the senior Individual Mobilization Augmentee to the director of installations and mission support.

She said she is “thrilled with this honor” and hopes to spend many more years serving the Air Force, the AIA and her community “by increasing the quality of its architecture and making people’s surroundings meaningful in their lives.”

Ms. Loomis is a graduate of Miami University of Ohio, having received a bachelor of environmental design with honors in 1983. She holds also master degrees in architecture and construction management from Washington University in St. Louis; an MBA from Old Dominion University in Norfolk, Va.; and a Ph.D. in urban studies, also from Old Dominion.

The College of Fellows was founded in 1952. Its purpose is to stimulate a sharing of interests among Fellows, to promote the purposes of the Institute, to advance the profession of architecture and to be of ever-increasing service to society.

Out of a membership of more than 75,000, there are fewer than 2,500 AIA members who have achieved fellowship. □



# Partnership's

## 10<sup>th</sup> anniversary recognized

**T**he Department of Defense Texas Environmental Partnership recently reached its tenth anniversary, a milestone recognized in the state capital of Austin at the Texas Commission for Environmental Quality's Trade Fair and Conference in May.

During a ceremony held at the event, 35 TXEP members were asked to stand and TCEQ officials presented a certificate to the partnership's DOD co-chair Dr. Thom Rennie of AFCEE's Central Regional Environmental Office in Dallas. The award lauded the partnership's "ten years of environmental innovation."

TXEP is considered the largest partnering effort between a state environmental agency, EPA and all major DOD installations in a state, said Air Force officials.

TXEP has "set the standard for breaking down barriers, building trust and fostering cooperation by sharing resources to promote environmental stewardship in all aspects of military operations in" the state, TCEQ officials said.

They added that by "effectively getting DOD installations and regulators face-to-face to seek resolution on environmental issues, the TXEP has become a national model" in protecting the environment while enhancing mission readiness.

Partnerships in several other states, including Ohio, Illinois, Colorado, Wisconsin and Hawaii, have been modeled after the TXEP.

"The Central Region REO invests considerable energy into the Texas Environmental Partnership," said the office's director Robert Gill. "Our Texas Air Force bases benefit greatly from resolving issues with state and federal regulators through the partnership. It is rewarding to see that the state of Texas values this effort as much as we do."

Partnership successes include identifying more than 500 hazardous-waste reduction opportunities by arranging non-regulatory site assistance visits by the state regulators to DOD installations. As a result, more than one million pounds of hazardous waste were eliminated, resulting in over \$2.7 million in savings.

The partnership has won the White House Closing the Circle Award and the Vice-President Albert Gore Hammer Award.

In particular, discussing bills pending in the Texas legislature has helped partnership installations take action to increase their regulatory compliance, thus enhancing their defense mission readiness and environmental stewardship, said REO officials.

The partnership began in 1995 when representatives from DOD, other federal agencies and what was then the Texas Natural Resources Conservation Commission join forces to create the Texas Pollution Prevention Partnership, or TXP3.

Chartered in 1997, the partnership's purpose was to address pollution-prevention issues at DOD installations in the state. It took its present name in 2002 to reflect its expanded focus beyond just pollution prevention, to include all environmental and compliance issues of interest to military installations and regulators in Texas.

Co-chaired by Matt Baker of TCEQ and Dr. Rennie, the partnership meets quarterly, including a gathering held every year at the TCEQ and Environmental Protection Region 6 offices as well as a meeting and tour at a Texas military installation. □



Department of Defense Texas Environmental Partnership co-chairs Matt Baker, left, of the Texas Commission on Environmental Quality, and AFCEE's Dr. Thom Rennie hold the certificate presented in recognition of the partnership's tenth anniversary. The presentation was made at TCEQ's Trade Fair and Conference in May. (Courtesy photo)



Members of the Department of Defense Texas Environmental Partnership pose with the framed certificate presented in honor of the group's anniversary at the Texas Commission on Environmental Quality Trade Fair and Conference in May. Partnerships in several other states have been modeled after the TXEP. It is considered the largest partnering effort between a state environmental agency, EPA and all major DOD installations in a state. (Courtesy photo)

# New C-17 hangar goes up at Hickam

By Marti D. Ribeiro

Construction on the C-17 Corrosion Control Hangar at Hickam Air Force Base, Hawaii, has reached the mid-point.

AFCEE is constructing a 63,945-square-foot hangar (large enough to house a professional football field) that will feature a hangar bay, four offices, and break, locker, composite repair, tool, paint and media-blast rooms.

It will also include a 271-foot tow lane to provide access from the hangar to the airfield.

Hickam has to make room for eight brand-new C-17 Globemaster III aircraft with the construction of various facilities, including the new corrosion control hangar, to paint and wash the aircraft and another facility to perform maintenance functions.

"Currently there are no existing facilities large enough to environmentally perform aircraft corrosion control (paint and wash) functions on the C-17 aircraft at Hickam," said Kevin Wong, project principal with URS, the AFCEE contractor building the facility.

Going up adjacent to the hangar is a 25,301-square-foot C-17 maintenance shop.

"This will house the pneudraulics, electro/environmental and non-destructive inspection shops," said Capt. Kevin Szymanski, project manager and AFCEE liaison to Pacific Air Forces Command.

But according to the captain, that's not all AFCEE is building.

"We're also putting in a 979-square-foot fire protection pump facility to include above-ground water tanks which are capable of holding up to 130,000 gallons," he said.

According to the captain, the pump facility provides a much-needed capability that the current facility doesn't accommodate.

Typical water mains cannot deliver water quickly enough, but the new pumps will boost the water delivery rate and can get the fire under control faster, he said.

These facilities are positioned to become part of a C-17 campus at Hickam, which will eventually include flight simulators, squadron operations building and a consolidated maintenance complex.

AFCEE is responsible for the construction of the hangar and the maintenance facilities.



New C-17 hangar goes up at Hickam Air Force Base, Hawaii. The 63,945-square-foot building is big enough to house a professional football field. (Courtesy photo)

Currently, the majority of the C-17 maintenance is conducted outside in the elements, and although good weather usually prevails in Hawaii, the state does experience trade winds on a routine basis, according to Col. John Torres, 15th Airlift Wing commander.

When the trade winds get too strong, many operations become too dangerous to perform, such as jacking up the aircraft to change tires and working on top of the 55-foot tail, he explained.

"The weather can and does impact our current maintenance capabilities," Colonel Torres said.

With this new C-17 campus, maintenance crews will have the ability to fix aircraft despite the weather, as well as perform large-scale maintenance functions that previously were conducted only at other C-17 locations.

"In the end, the total life cycle costs to operate and maintain the C-17s decrease by having hangar capability here at Hickam," Colonel Torres said.

According to the Hickam commander, the construction of the hangar provides the culmination of the transformation of the wing from an airbase wing to a full-fledged air mobility flying wing.

"These hangars represent the final steps in standing up the C-17 program here at Hickam," he said. "This operation at Hickam is a first. Perhaps symbolically, the erection of the hangars says the C-17s are here to stay in Hawaii." □

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Front of the new Youth Center at Lackland Air Force Base, Texas, before the ribbon-cutting ceremony that inaugurated the 34,000-square-foot building.  
*Story beings on page 6.*